

Four Corners Air Quality Task Force Oil and Gas Work Group Meeting

August 9, 2006

4:15 p.m.

Participants

Cindy Allen, CDPHE-APCD; Andy Berger, NMED-AQB; Mike Brand, Cummins; Jan Rees, Citizen; Walt Brown, BLM/FS; Bill Hochheiser, USDOE; Brittany Benko, BP; Bruce Gantner, ConocoPhillips; Sarah Nuss-Warren, KSU; Vic Sheldon, Caterpillar; Daniel Olsen, CSU; Ryan Dupnick, Compliance Controls; James Temte, Southern Ute Air Quality Program; Josh Joswick, San Juan Citizens Alliance; Kellie Skelton, Energen Resources; Jim Ramakka, BLM; Lisa Sumi, OGAP; Mike Silverstein, CDPHE-APCD; Bob Gonzalez, Caterpillar; Kirby Chapman, KSU; Virgil Frazier, Southern Ute Growth Fund; Margie Perkins, CDPHE-APCD; Carl Daly, USEPA Region 8.

Agenda Items/Issues

1. Welcome/Introductions

Cindy Allen welcomed attendees and the group went through a round-robin of introductions.

2. Presentation – Kirby Chapman

Kirby Chapman from Kansas State University gave a presentation on a field emissions testing project on engines of varied sizes. Two companies have signed up to participate and KSU is interested in gathering more participants. Kirby's presentation will be posted on the website.

3. Brief Review – Engine Documents

Cindy Allen led the group in confirming the rationale for why select mitigation options for engines were not written to be included in the Task Force report. The options and accompanying rationale are listed below.

- Stationary RICE
 - (a) Emissions limits of 1 g/bph-hr and 2 g/bhp-hr for engines, based on HP.
 - i. Incorporate action into application of NSPS to existing engines
 - (b) Replacements of engines to decrease false starts
 - i. Covered in operational
 - ii. Blowdown emissions
 - iii. Insignificant emissions reductions
 - (c) Replace piston rod packing
 - i. Dave Brown will add to Operation and Maintenance option
 - (d) Minimize blowdowns
 - i. Common industry practice – not an option

- (e) Replace gas engines starters with electric compressors
 - i. Included in Exploration and Production options
- Drill Rigs
 - (a) Replace dirtiest 20%
 - i. Tier II-IV
 - ii. Move to overarching option
 - iii. Concerns re: engine availability
 - iv. Include timeline
 - v. Insignificant emissions reductions
 - (b) Electric rigs
 - i. Brittany Benko will draft
 - (c) Other Rig options
 - i. Carl Daly to add short blurbs on other mitigation option ideas.
- Other
 - (a) Vic Sheldon and Bob Gonzalez too draft BMP option for rig engine loading.

4. Work Plan Development for Exploration and Production

Cindy Allen led the group in brainstorming ideas for draft mitigation options for the Exploration and Production sector. The categories, drafting teams, and mitigation options are listed below. Each drafting team will set its own schedule of conference calls and assignments to deliver new draft mitigation options by 9/8/06.

Category 1: Tanks

[Drafting team: Bruce Gantner (lead), Kellie Skelton, Myke Lane]

- BMP
 - Close hatches
 - Maintain seals
 - Enardo valves
- Install VRU
- Install flare
- Inert gas blanket
- Floating roof tanks
- Different mufflers
- Centralized collection

Category 2: Dehydrators/Separators/Heaters

[Drafting team: Brittany Benko (lead), Bruce Gantner, Dave Brown, Lisa Sumi]

- Control glycol pump rates
- Replace high bleed pneumatics with low/no-bleed pneumatics

- Optimization and automation
- Low/Ultra low NOX burners
- "Quantum Leap" dehy units
- Insulated vessels
- Combustors for still vents
- VRU
- Desiccant dehy
- Centralized dehydration

Category 3: Wells

[Drafting team: Carl Daly (lead), Dave Brown, Vic Sheldon, Lisa Sumi, Josh Joswick]

- Flareless completions (Green completions)
- Plunger lifts -- instead of manual -- this is common practice
- Plunger optimization
- Study: Trade-off between flare completions and vent completions

Category 4: Pneumatics/ Controllers/Fugitives

[Drafting team: Reid Smith (lead), James Temte, Bill Hochheiser]

- Air actuated pneumatics
- BMP -- infrared detection of leaks
- Electrification of starters and valves
- Directed inspection and maintenance program
- Electric chemical pumps

The work group will have their regular scheduled conference calls in September and October.

Adjourn

Meeting adjourned at 6:30 p.m.